

Amendments to the claims:

Please amend the claims as indicated below. Added text is underlined and deleted text is either struck through or shown in double enclosing brackets. Applicants aver that no new matter has been added.

1. (currently amended) A switch within an asynchronous communication network comprising, one or more outputs and a buffer unit communicating with the switch, wherein the buffer unit ~~is adapted to~~ buffers the data until a predefined number, greater than one, of wavelengths leading to a buffered destination is vacant.

2. (currently amended) The switch of claim 1 wherein the switch ~~is adapted to~~ monitors to detect a number of vacant wavelengths at the switch outputs being greater than or equal to the predefined number.

3. (original) The switch of claim 1, wherein the data and buffered packets are classified according to one of (a) packet data length and (b) length of non-packet data.

4. (currently amended) The switch of claim 3, wherein at least one data packet ~~of packet data~~ with a length within a first range is associated with a first queue, a further data packet[[s]] ~~of data~~ with a length within a second range is associated with a second queue, and a still further data packet[[s]] ~~of data~~ with a length within a third range is associated with a third queue, ~~further packets of data of other lengths associated with an arbitrary number of ranges and each range associated with a specific queue among the first, second and third queues.~~

5. (currently amended) The switch of claim 1 wherein data, ~~at the~~ buffer unit has inputs with data [[,]] originating[[es]] from lines external to the switch.

6. (currently amended) The switch of claim 5, wherein the lines external to the switch lines are ~~low-bit rate lines from~~ aggregation inputs, ~~namely metro access rings.~~

7. (currently amended) The switch of claim 1, wherein the buffer unit has an input and the data, at the buffer unit input is routed from a one or more switch inputs.

8. (original) The switch of claim 1, where the switch is selected to operate within one of the following networks among the group consisting of an optical packet switched network, an optical bursts switched network, an electronic packet switched network, a WDM network, and an electronic bursts switched network.

9. (original) The switch of claim 5, where the switch is an optical switching unit.

10. (original) The switch according to claim 5, where the switch is an electronic switching unit.

11. (original) The switch of claim 7, where at least one of the output or input signals of the switch are WDM.

12. (original) The switch of claim 9, where the buffer is an electronic type of buffer.

13. (currently amended) A method for organizing dataflows in an asynchronous communication network including at least one switch, where said switch is associated with at least one buffer and at least a dataflow that can be divided into data packets, comprising: communicating buffered data to the switch, and buffering the data in the buffer unit until a predefined number, being at least two, of wavelengths leading to a buffered packets destination is vacant.

14. (currently amended) The method of claim 13 further defined by monitoring to schedule data from the buffer unit to an output of the switch upon a number of vacant wavelengths at the output of the switch being at least the predefined number.

15. (original) The method of claim 13 further defined by buffering data packets into a number of queues according to parameters of the data packets.

16. (original) The method of claim 13, wherein the method further comprises associating data packets with a length within a first range with a first queue.

17. (original) The method of claim 13, wherein the method further comprises associating data packets with a length within a second range with a second queue.

18. (original) The method of claim 13, wherein the method further comprises associating data packets with a length within a third range with a third queue.

19. (currently amended) The method of claim 13, wherein the method further comprises associating a length of each data packet[[s]] ~~of other lengths~~ with a one of a predefined ~~an arbitrary~~ number of ranges of data packet lengths where each range is ~~can be~~ associated with a specific queue.

20. (new) The method of claim 19, wherein the predefined number of vacant wavelengths is specific to each queue.

21. (new) The switch of claim 1, further comprising a plurality of queues in the buffer unit, each queue being associated with a distinct range of data packet lengths, the predefined number of vacant wavelengths being characteristic to each queue.